LG

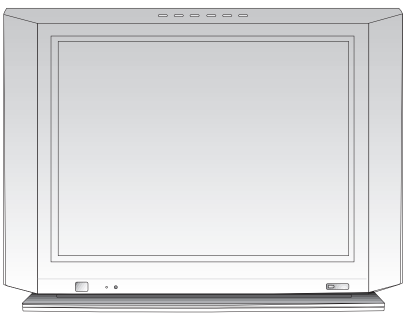
website:http://biz.LGservice.com
e-mail:http://www.LGEservice.com/techsup.html

COLOR TV
SERVICE MANUAL

CHASSIS : MC-049A

MODEL:CT-29M65VE

CAUTION
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



CONTENTS

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ¡ 1.5KV: 14-19 inch, 26 ¡ 1.5KV: 19-21 inch,
29.0 ¡ 1.5KV: 25-29 inch, 30.0 ¡ 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

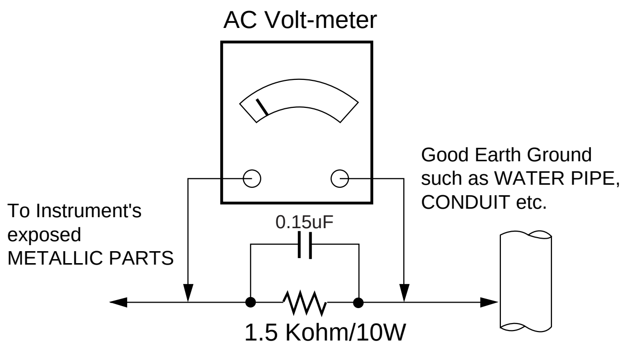
Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

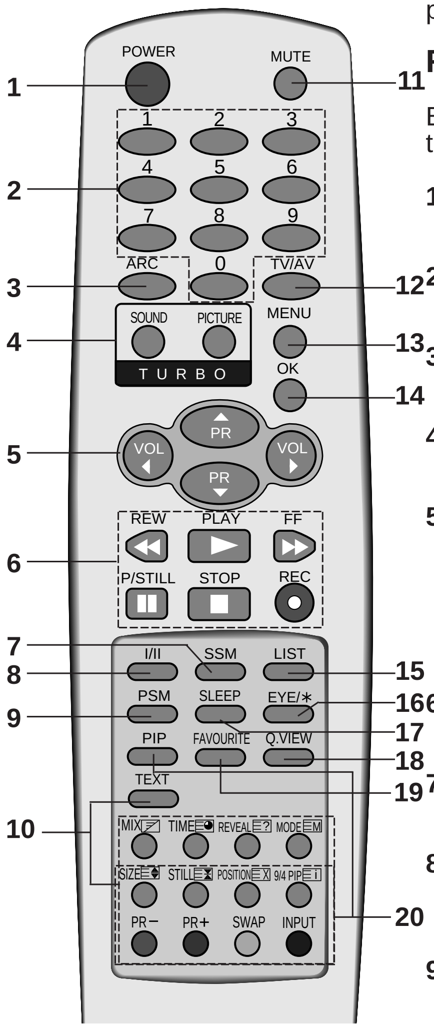
Leakage Current Hot Check (See below Figure)
Plug the AC cord directly into the AC outlet.
Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit

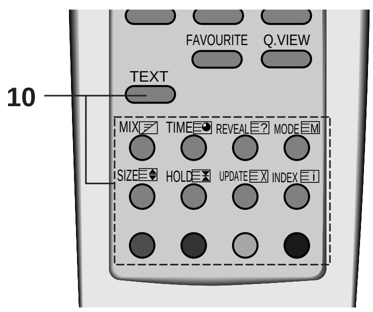


DESCRIPTION OF CONTROLS

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.



(With TELETEXT / PIP)



(With TELETEXT / Without PIP)

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.

1. **POWER**
   switches the set on from standby or off to standby.

2. **NUMBER BUTTONS**
   switches the set on from standby or directly select a number.

3. **ARC (Aspect Ratio Control)**
   changes the picture format.

4. **TURBO PICTURE / SOUND BUTTON**
   selects Turbo picture / sound.

5. **▲ / ▼ (Programme Up/Down)**
   selects a programme or a menu item.
   switches the set on from standby.
   ◀ / ▶ (Volume Up/Down)
   adjusts the volume.
   adjusts menu settings.

6. **VCR BUTTONS (option)**
   control a LG video cassette recorder.

7. **SSM (Sound Status Memory)**
   recalls your preferred sound setting.

8. **I/II (option)**
   selects the language during dual language broadcast (option).
   selects the sound output.

9. **PSM (Picture Status Memory)**
   recalls your preferred picture setting.

10. **TELETEXT BUTTONS (option)**
    These buttons are used for teletext.
    For further details, see the ‘Teletext’ section.

11. **MUTE**
    switches the sound on or off.

12. **TV/AV**
    selects TV or AV mode.
    switches the set on from standby.

13. **MENU**
    selects a menu.

14. **OK**
    accepts your selection or displays the current mode.

15. LIST
displays the programme table.

16. EYE/✱ (option)
switches the eye function on or off.

17. SLEEP
sets the sleep timer.

18. Q.VIEW
returns to the previously viewed programme.

19. FAVOURITE
selects a favorite programme.

20. PIP BUTTONS (option)

PIP
switches the sub picture on or off.

PR +/-
selects a programme for the sub picture.

SWAP
alternates between main and sub picture.

INPUT
selects the input mode for the sub picture.

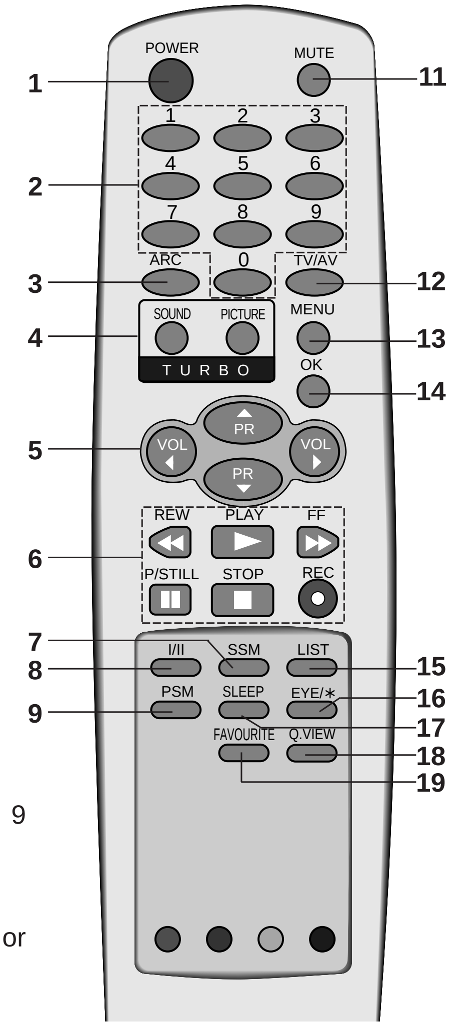
SIZE
adjusts the sub picture size.

STILL
freezes motion of the sub picture.

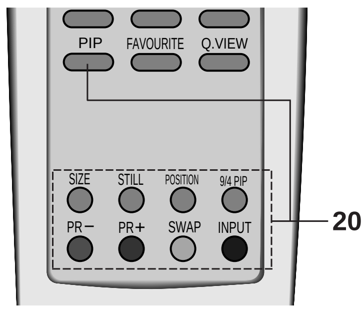
POSITION
relocates the sub picture in clockwise direction.

9/4 PIP
switches on or off the programme scan mode through 4 or 9 sub pictures.

COLOURED BUTTONS
These buttons are used for teletext (only TELETEXT models) or programme edit.



(Without TELETEXT / PIP)



(Without TELETEXT / With PIP)

SPECIFICATIONS

Note : Specification and others are subject to change without notice for improvement.

■ Scope

This specification can be applied to all the television related to MC-049A Chassis.

Chassis	Market	Brand	Standard input Voltage
MC049A	Middle East, Africa	LG	110-240Vac, 50/60Hz
	EU		230Vac, 50/60Hz

■ Test Condition

1) Temperature :20 ± 5°C(CST : 40 ± 5°C)
2) Relative Humidity:65 ± 10%
3) Use the parts only designated in B.O.M.,PARTS SPEC.,or drawings.
4) Follow each drawing or spec for spec and performance of parts,based upon P/N of B.O.M
5) Warm up TV set for more than 20min. before the measurement.

■ Test and Inspection Method

1) performance:Follow the Standard of LG TV test
2) Standards of Etc. requirement
  - Safety: IEC60065
  - EMC: EN55020,EN55013

■ General Specification

No	Item	Specification	Remark
1	Receiving System	PAL,SECAM BG	For EU/ For Non EU
		PAL/SECAM DK	
		PAL-I/I	
		NTSC M	
		NTSC 4.43(AV)	
		SECAM-L/L’	OPTION
		NTSC M/ PAL M/N	
2	Available Channel	VHF : E2 ~ E12	
		UHF : E21 ~ E69	
		CATV : S1 ~ S20	
		HYPER : S21 ~ S41	
3	Input Voltage	AC 110-240V, 50/60Hz	Non EU
		AC 230V 50/60Hz	EU
4	Market	EU,CIS, China, Asia, Africa	
5	Screen Size	Flat 25”, 29”, 28”, 32”	
		NOR 25”, 27”, 28”, 29”	
6	Tuning System	FVS 100Program	200 PR. (W/O TXT)
7	Operating Environment	1) Temp : 0 ~ 45 deg	
		2) Humidity: 85% under	
8	Storage Environment	1) Temp : -20 ~ 60 deg	
		2) Humidity: 85% under	

ADJUSTMENT INSTRUCTIONS

1. Application Object

These instructions are applied to all of the color TV, MC-049A.

2. Notes

(1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
(2) Adjustment must be done in the correct order.But the adjustment can be changed by consideration of mass production.
(3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
(4) The input AC voltage of the receiver must keep rating voltage in adjusting.
(5) The receiver must be operated for about 15 minutes prior to the adjustment.

3. Focus adjustment

3.1. Preliminary steps

Tune the TV set to receive a digital pattern.
(SVC mode:Automatically mode change the STANDARD MODE)

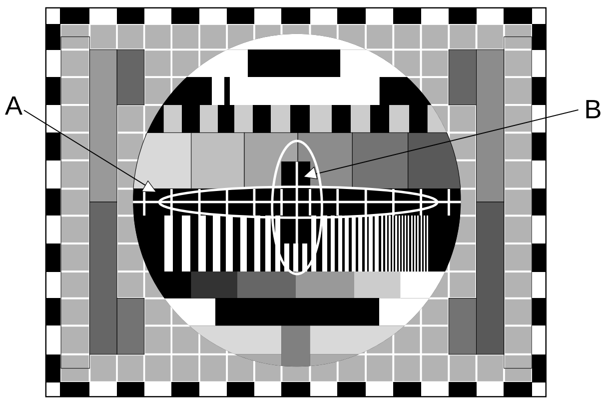
3.2. Adjustment Method

1) Single Focus CPT

Adjust the upper Focus volume of FBT for the best focus of horizontal line A,vertical line B.

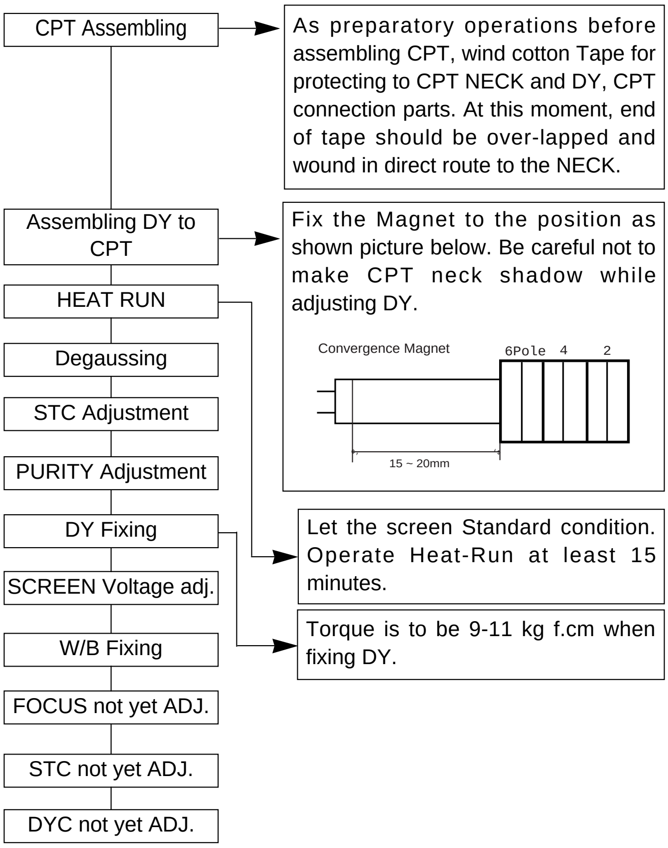
2) Double Focus CPT

a) Adjust the lower Focus volume of FBT for the best focus of vertical line B.
b) Adjust the upper Focus volume of FBT for the best focus of area A.
c) Repeat above step 1) and 2) for the best overall focus.



<Fig 1. PAL Digital Pattern(EU05CH)>

4. Purity & Convergence adjustment



4.1. Color purity adjustment

(1) It makes CPT or CABINET enough to demagnetization.
(2) Receive the signal of red raster.
(3) Loosen fixed screw of DY and closely to CPT funnel part.
(4) Check the center of screen that PURITY MAGNET of CPT by crossing adjustment. At this time, 4 & 6 pole magnet is located to magnet of nothing.
(5) Move the DY to make equal red on whole screen and it does not to make the DY by fixed screw after check a simple color of Red/Green/Blue and white raster whether or not it is a pollution of color.
(At this time, take care raster of screen and DY must fixing in the condition which maintains a horizontality.)
(6) Check the TV set by move direction.

4.2. Convergence adjustment

These adjustments can the best condition of focus after finished purity adjustment.

(1) Receive the signal of cross hatch that BACK RASTER is black.
(2) Adjust brightness and luminosity till dot appear 9 ~12.
(3) Open angle of the two tab of 4 pole MAGNET by isogonic angle and accord with vertical line of red and blue color in the middle of screen.
(4) Maintain as angle of (3) and rotate the tab to accord with vertical line of Red and Blue color in the middle of screen.

(5) Open angle of the two tab of 6 pole magnet by isogonic angle and accord with vertical line of Red/Blue and Green.
(6) Maintain as angle of (5) and rotate the tab to accord with horizontal line. In case of twisted horizontal line,repeat adjustment of (3) ~ (5) remembering the movement of Red/Green/Blue color.
(7) Move the DY to best condition of convergence and attach the CPT to a rubber-chock for fixed DY.

5. Screen voltage adjustment

(1) Receive the PAL or SECAM(NTSC) signal into RF mode regardless of channel.
(2) If you press the “ADJ”button in LINE SVC mode(IN-START button),the LINE SVC mode changes to screen adjustment mode.
(3) Turn the Screen Volume of FBT to change luminance of White signal center as shown below.
(4) Press the EXIT TV/AV button to exit SVC mode.

6. White balance adjustment

NOTE : When adjusting white balance automatically,connect the adjustment JIG in SVC mode.(When pressing IN-START,MUTE button on remote control for adjustment orderly,it changes to SVC mode and screen displays “CUT OFF”.)
(1) Receive 100% white pattern.
(2) Adjust LOW LIght status(4.5FL) of CUT R,CUT B at CG:70.
(3) Adjust HIGH LIght status(35FL) of WDR R,WDR B at WDR G:380.
(4) Repeat above step (2) and (3) for the best condition each status of High Light and Low Light.

<Table 1> White Balance Color analyzer

Menu	EU	N-EU
X	288	268
Y	295	273
Color Temperature	9000°K	13000°K

<Table 2> White Balance Initial Data

	Menu	Range	DATA
LOW LIGHT	CR	0 ~ 511	70
	CG	0 ~ 511	70
	CB	0 ~ 511	70
HIGH LIGHT	WR	0 ~ 511	430
	WG	0 ~ 511	380
	WB	0 ~ 511	430

<Table 3> White Balance Initial Data
1. IC

	Name	Maker	Algorithm			
VCD IC	VCT48xyi	Micronas	0	F	0	0
EP_ROM	24C16	ST, ATMEL				

2. White balance IIC Parameter

Program	TWBeng2.0	Program	TWBeng2.0	Speed	Delay
Vcd Slave	24C16	Eprom_Slave	AE	1	30

	R_Amp	R_Cut	B_Amp	B_Cut
Program	TWBeng2.0	TWBeng2.0	TWBeng2.0	TWBeng2.0
Sub Add	1C8	1C3	1CA	1C5
Start Bit	12	12	12	12
Stop Bit	4	4	4	4
Offset	0	0	0	0
Polarity	1	1	1	1
EP_Rom_S	7A7B	7475	7E7F	7879
Speed/ Plus	1	1	1	1

<CAUTION> W/B Program “Twbeng_v2.0”
- W/B adjustment after Cutoff
  : Instart -> adj. -> mute(cutoff)-> tv/av(wb)
  Release key is EXIT key
- W/B adjustment
  : Instart -> mute(cpuoff) ->
  Release key is TV/AV key

7.Deflection setting Data Adjustment

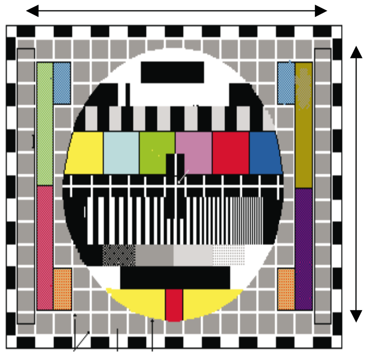
7.1 Adjustment preparation

(1) Tune the TV set to receive an Digital pattern(EU05CH).
(2) Deflection setting data adjustment is operate by SVC communicator.
(3) Enter the deflection mode by selection SERVICE1 key on SERVICE MENU after enter the adjustment mode by pressing LINE SVC MODE(IN-START KEY).
(4) Enter the deflection mode by pressing ADJUST key.
(5) Use the CH ▲,▼ key to select adjustment item.
(6) Use the VOL ◀,▶ key to increase/decrease data.

<Note>
(1) When adjusting a deflection,adjust N50Hz of PAL signal first and adjust a deflection at Normal 60Hz(NTSC).
(2) Adjust a deflection as shown below.
PAL 4:3 -> NTSC 4:3
(3) After finishing deflection adjustment,press the EXIT key to exit in adjustment mode.
(4) Wide Models
After adjusting 16:9(50Hz), Readjust 14:9(50Hz) -> ZOOM(50Hz) -> 4:3(50Hz) -> 16:9(60Hz) -> 14:9(60Hz) -> ZOOM(60Hz) -> 4:3(60Hz).

7.2 Adjustment

(1) VL(Vertical Linearity) adjustment:
Adjust the top & bottom size of inner circle to be equal.
(2) VA (Vertical Amplitude) adjustment:
Adjust so that the circle of a digital circle pattern should be located interval of 6~7mm from the effective screen of the CPT.
(3) SC (Vertical S correction) adjustment:
Adjust so that all distance between each lattice width of top/center/bottom are to be the same.



<Fig. 2>PAL Digital pattern (EU05CH)

(4) VS (Vertical Shift) adjustment:
Adjust so that the geometric vertical center line is in accord with vertical center line of CPT.

(5) HS(Horizontal Shift) adjustment:
Adjust so that the geometric horizontal center line is in accord with horizontal center line of CPT.

(6) EW(East-West Width) adjustment:
Adjust until the outmost left and right lattice of received pattern is accord with 25% of other lattice width.

(7) ET(Trapezoidal) adjustment:
Adjust to make the length of top horizontal line same with it of the bottom horizontal line.

(8) EP(Pin Cushion) adjustment:
Adjust so that middle portion of the outermost left and right vertical line look like parallel with vertical lines of the CPT.

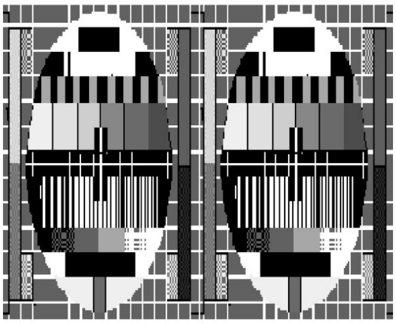
(9) ANGLE adjustment
When you adjust the angle, adjust correctly raster of left/right screen.

(10) BOW adjustment
A standard is not changing the default value.

(11) CRNU(Upper Corner Correction) adjustment:
After finished EP adjustment,adjust vertical line of left-top,right-top of screen to the best straight line.

(12) CRNL(Lower Corner Correction) adjustment:
After finished EP adjustment,adjust vertical line of left-bottom ,right-bottom of screen to the best straight line.

(13) PIP(PIP Position)
Adjust until the distance between PIP and main picture becomes about 1~2mm by using VOL +/- key.



<Fig. 3> PIP H Position

Menu	Variable range	N50Hz(PAL) 29”	N60Hz(NTSC) 29”
VS	-512~511	4	10
VA	-512~511	80	70
VL	-512~511	-70	-70
SC	-512~511	140	140
HS	32~2047	110	130
EW	-256~255	-70	-69
ET	-512~511	-12	-15
EP	-512~511	-80	-78
ANGLE	-512~511	0	0
BOW	-512~511	0	0
UPCOR	-512~511	8	8
LOCOR	-512~511	20	20
PIP_H	0~40	15	15

8.OPTION Adjustment

8-1. Preparation for Adjustment

1) This option adjustment decides function in accordance with model. Press the SVC TX adjustment button(IN-START button) at SVC mode, then adjust the option at OPTION1 mode.
2) Mark the option adjustment data like [111,111,111,111] in BOM.

8-2. Adjustment Method

OPTION data input

1) Function : 1, No function : 0
2) Select each OPTION function by the CH Up/Down button and then set up each OPTION by the VOL Up/Down button at OPTION 1,2,3,4.

8-3. OPTION Function

Option	Code	Function
AV3	0	Without A/V3
	1	With AV3
S-VIDEO	0	With out S-VIDEO
	1	With S-VIDEO
DVD	0	Without COMPONENT(480i)
	1	With COMPONENT(480i)
SCART	0	PHONE JACK
	1	SCART JACK
WIDE	0	Not WIDE MODEL
	1	WIDE MODEL
GAME	0	Without GAME function
	1	With GAME function
21inch	0	Not 21inch MODEL
	1	21inch MODEL
A2ST	0	NICAM
	1	NICAM & FM STEREO

8-4. OPTION2 Function

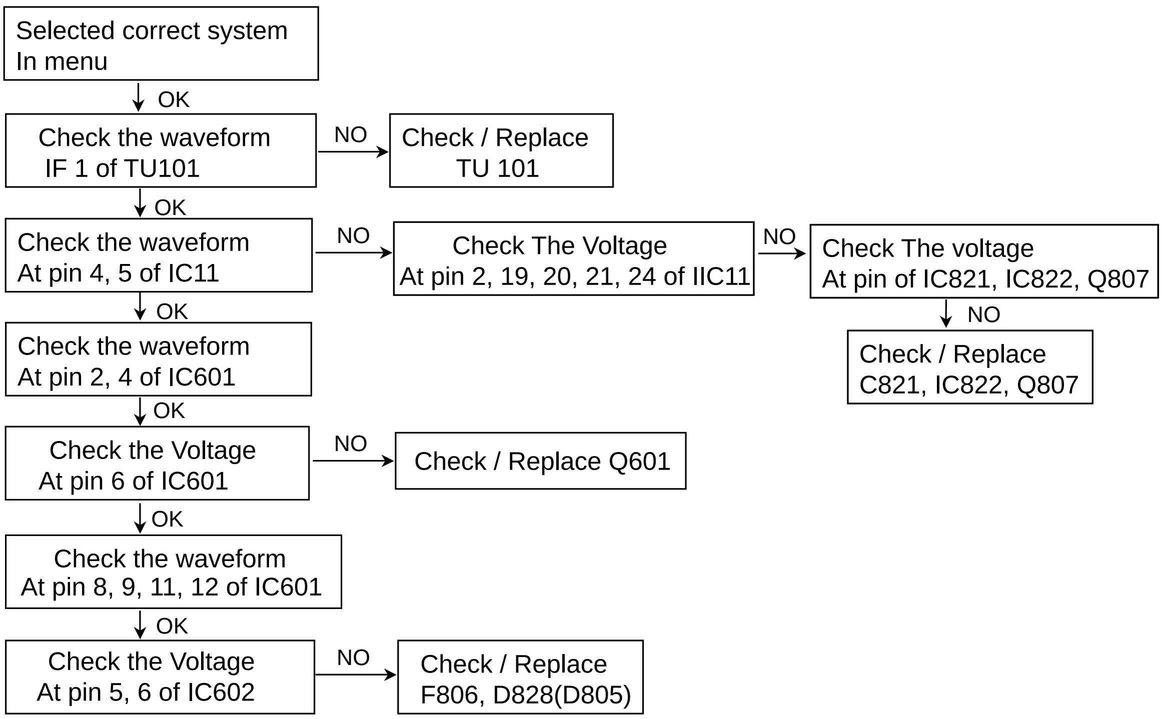
Option	Code	Function
TSEARCH	0	Without TURBO SEARCH
	1	With TURBO SEARCH
200PR	0	100 PROGRAM SAVE
	1	200 PROGRAM SAVE
EYE	0	Without EYE
	1	With EYE
TX019	0	
	1	
8KEY	0	
	1	8KEY
4KEY	0	
	1	4KEY

8-5. OPTION3 Function

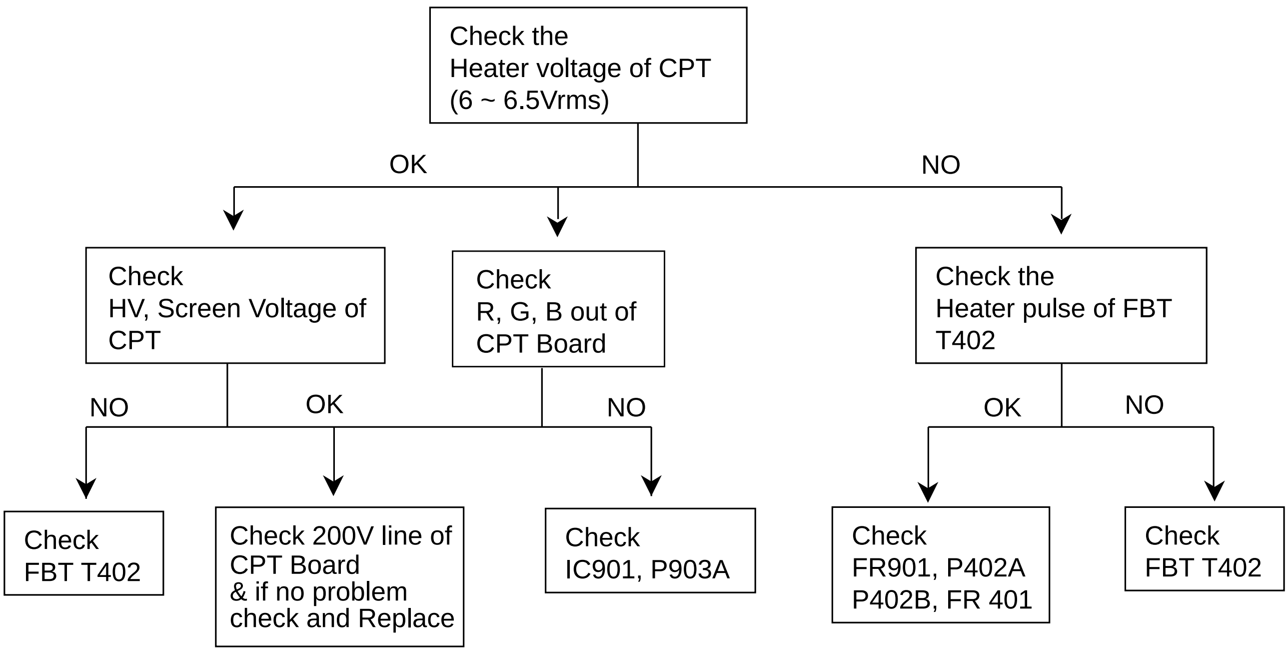
Option	Code	Function	REMARK
SYSTEM	0		
	1		
ACMS	0	Without ACMS Function	
	1	With ACMS Function	
TOP	0	FLOT TXT	
	1	TOP TXT	
CH+AU	0	Without D/K CHINA or BB SYSTEM	
	1	With D/K CHINA or BB SYSTEM	China, Australia
HDEV	0		
	1		

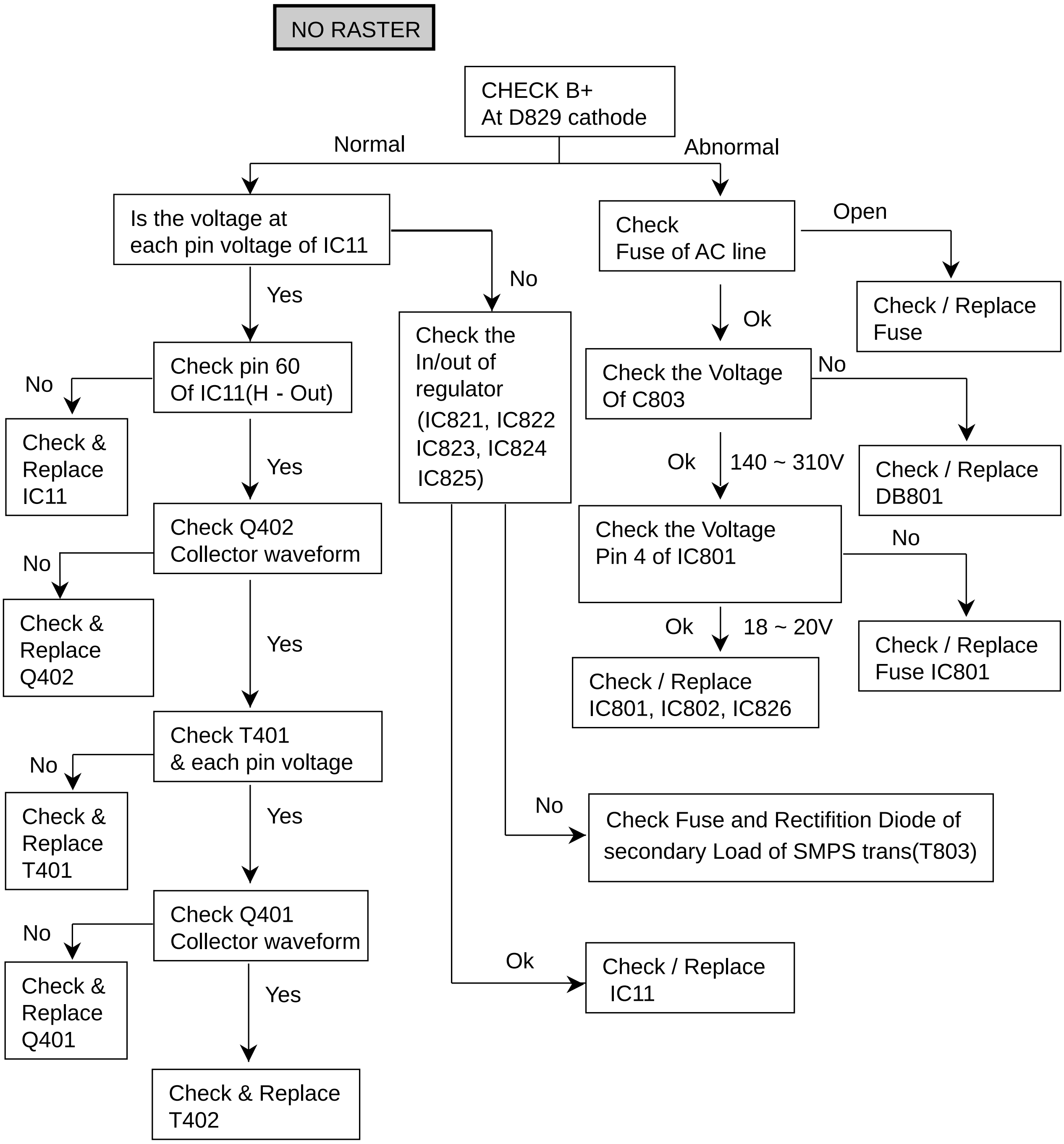
TROUBLE SHOOTING

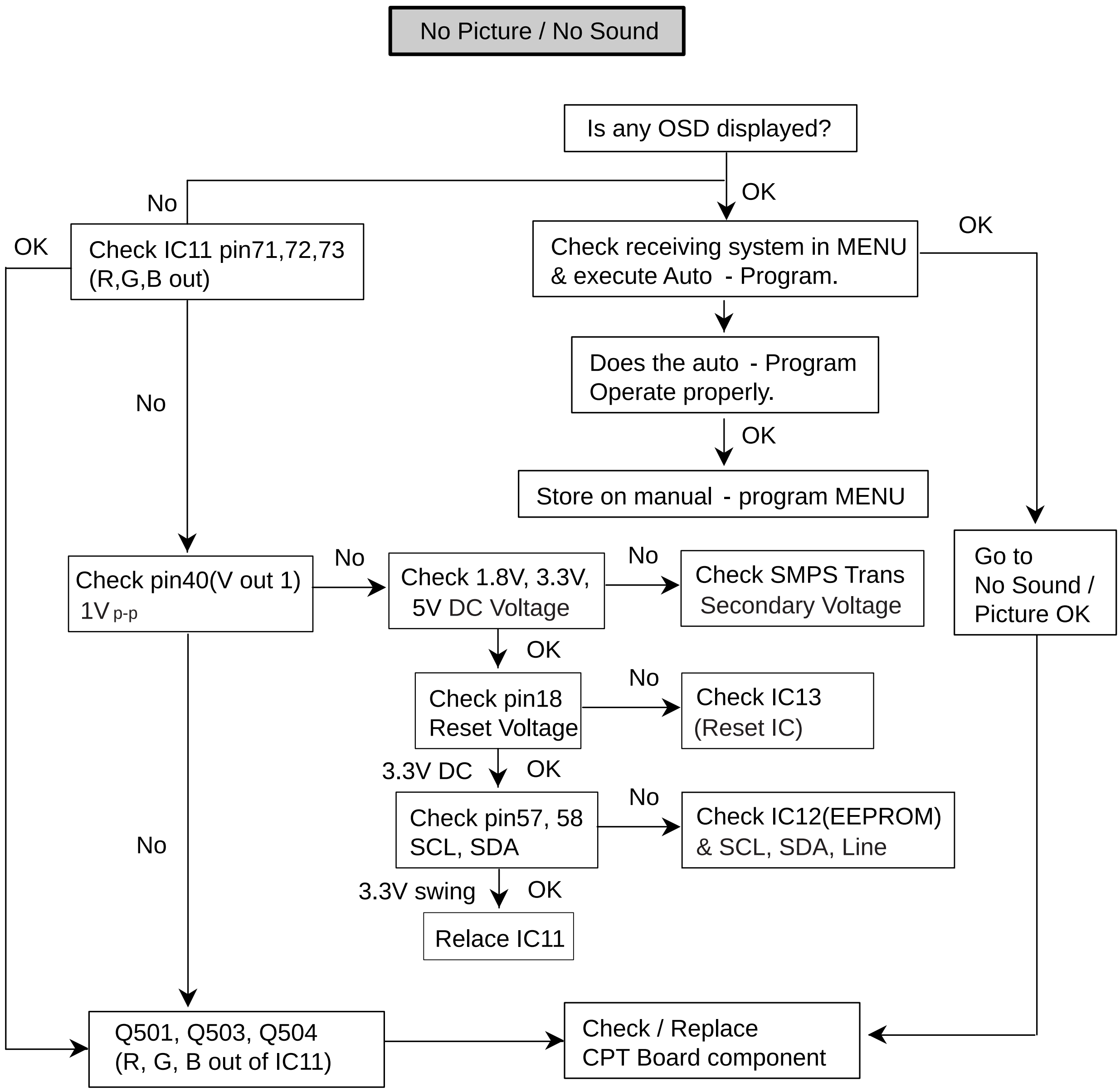
RF- STEREO

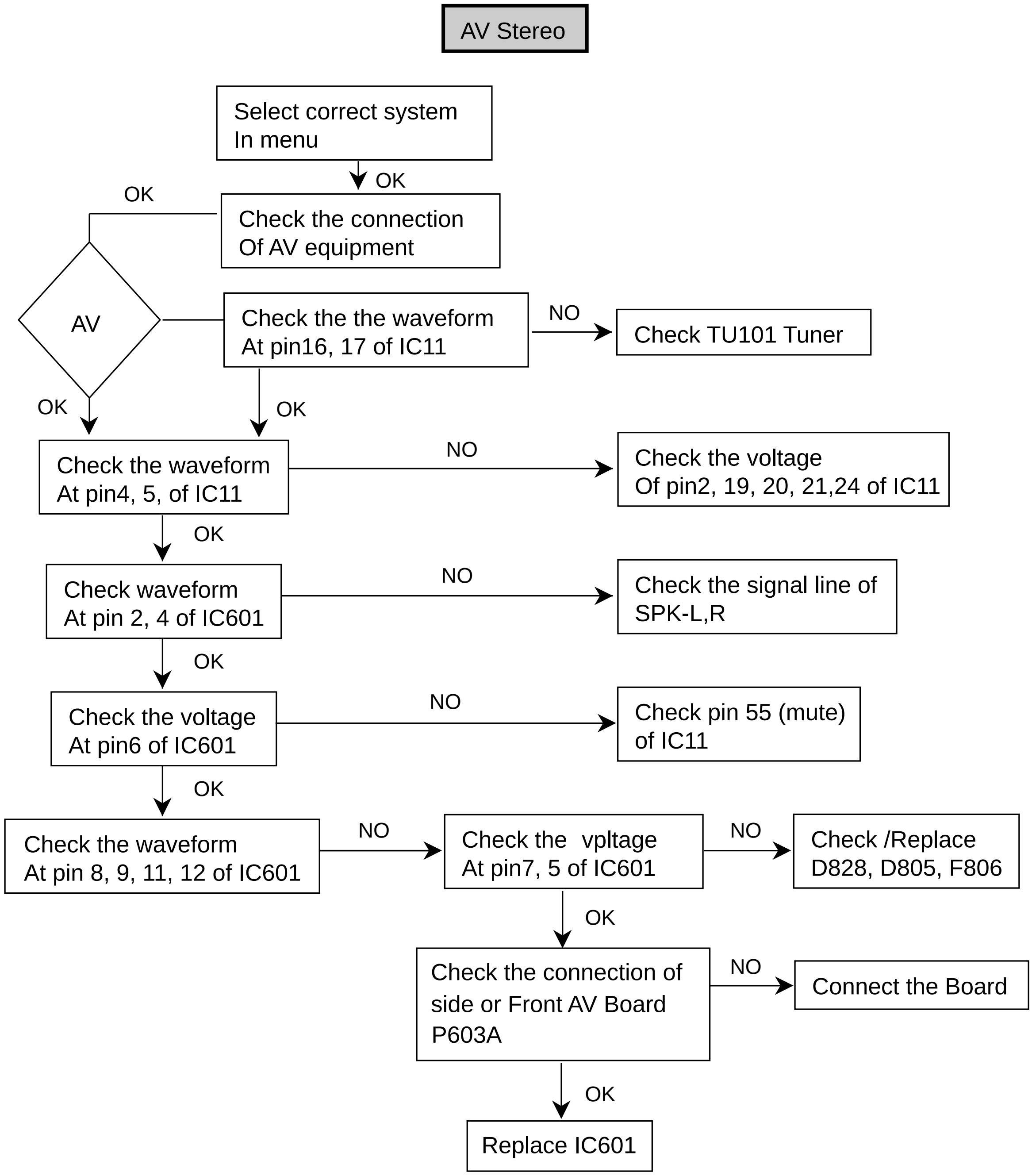


No Raster / Sound OK



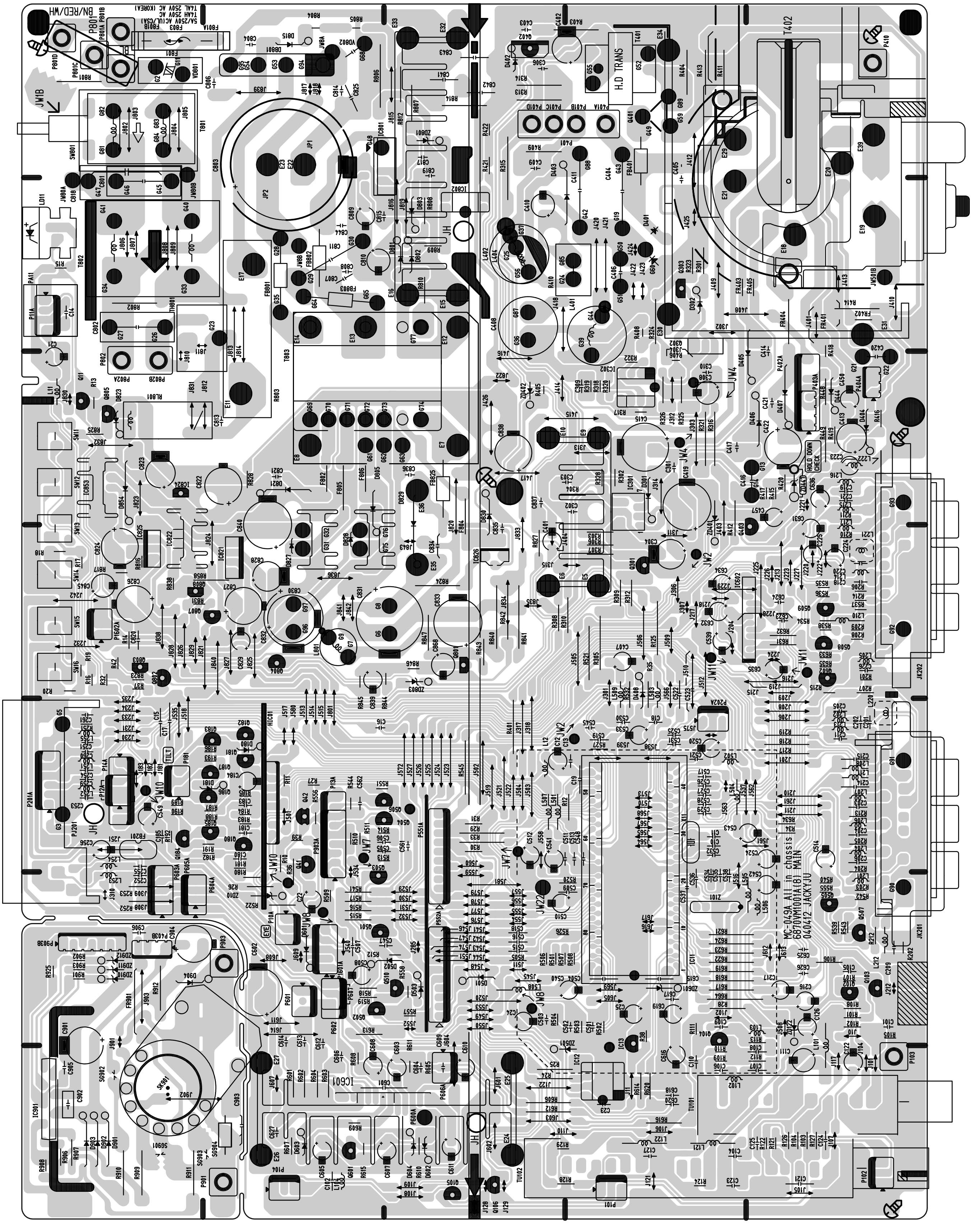

NO RASTER
CHECK B+
At D829 cathode
Normal
Abnormal
Is the voltage at
each pin voltage of IC11
Yes
No
Check pin 60
Of IC11(H - Out)
No
Check &
Replace
IC11
Yes
Check Q402
Collector waveform
No
Check &
Replace
Q402
Yes
Check T401
& each pin voltage
No
Check &
Replace
T401
Yes
Check Q401
Collector waveform
No
Check &
Replace
Q401
Yes
Check & Replace
T402
Check the
In/out of
regulator
(IC821, IC822
IC823, IC824
IC825)
No
Check Fuse and Rectifition Diode of
secondary Load of SMPS trans(T803)
Ok
Check / Replace
IC11
Check
Fuse of AC line
Open
Check / Replace
Fuse
Ok
Check the Voltage
Of C803
No
Check / Replace
DB801
Ok
140 ~ 310V
Check the Voltage
Pin 4 of IC801
No
Check / Replace
Fuse IC801
Ok
18 ~ 20V
Check / Replace
IC801, IC802, IC826


No Picture / No Sound
Is any OSD displayed?
No
OK
OK
OK
Check IC11 pin71,72,73
(R,G,B out)
Check receiving system in MENU
& execute Auto - Program.
Does the auto - Program
Operate properly.
OK
Store on manual - program MENU
No
Check pin40(V out 1)
1V p-p
No
Check 1.8V, 3.3V,
5V DC Voltage
No
Check SMPS Trans
Secondary Voltage
Go to
No Sound /
Picture OK
OK
Check pin18
Reset Voltage
No
Check IC13
(Reset IC)
3.3V DC
OK
Check pin57, 58
SCL, SDA
No
Check IC12(EEPROM)
& SCL, SDA, Line
No
3.3V swing
OK
Relace IC11
Q501, Q503, Q504
(R, G, B out of IC11)
Check / Replace
CPT Board component

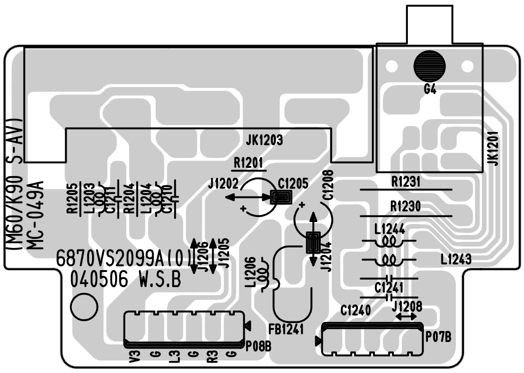

AV Stereo
Select correct system
In menu
OK
OK
Check the connection
Of AV equipment
AV
Check the the waveform
At pin16, 17 of IC11
NO
Check TU101 Tuner
OK
OK
Check the waveform
At pin4, 5, of IC11
NO
Check the voltage
Of pin2, 19, 20, 21,24 of IC11
OK
Check waveform
At pin 2, 4 of IC601
NO
Check the signal line of
SPK-L,R
OK
Check the voltage
At pin6 of IC601
NO
Check pin 55 (mute)
of IC11
OK
Check the waveform
At pin 8, 9, 11, 12 of IC601
NO
Check the vpltage
At pin7, 5 of IC601
NO
Check /Replace
D828, D805, F806
OK
Check the connection of
side or Front AV Board
P603A
NO
Connect the Board
OK
Replace IC601

PRINTED CIRCUIT BOARD

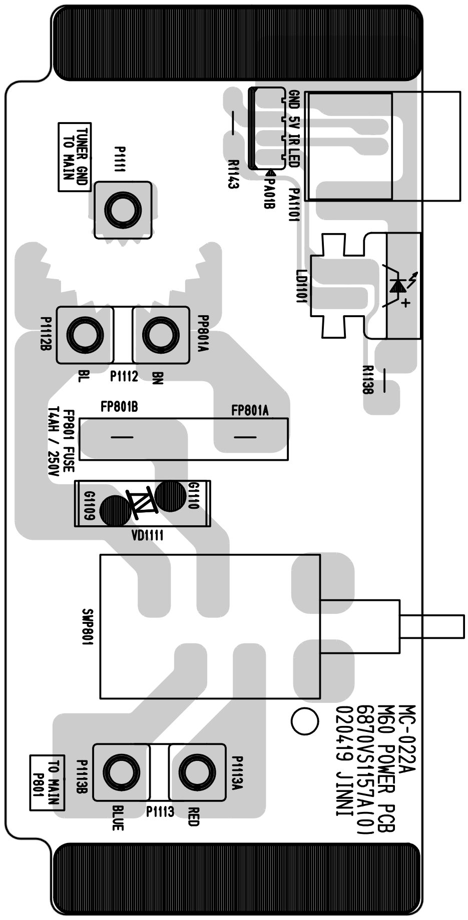
MAIN



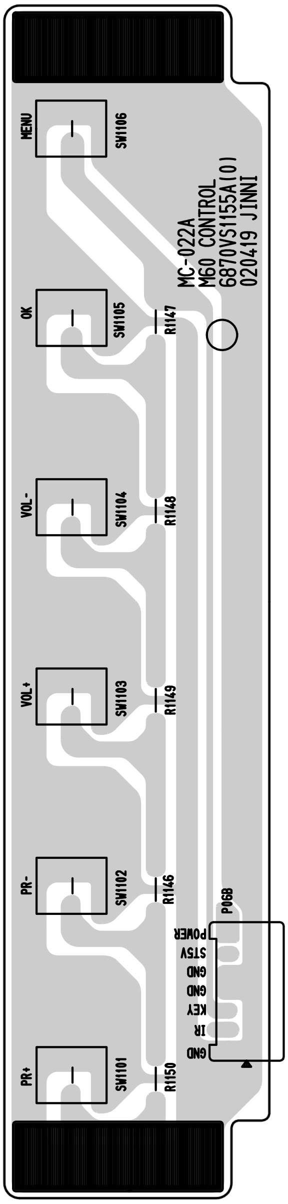
SIDE A/V



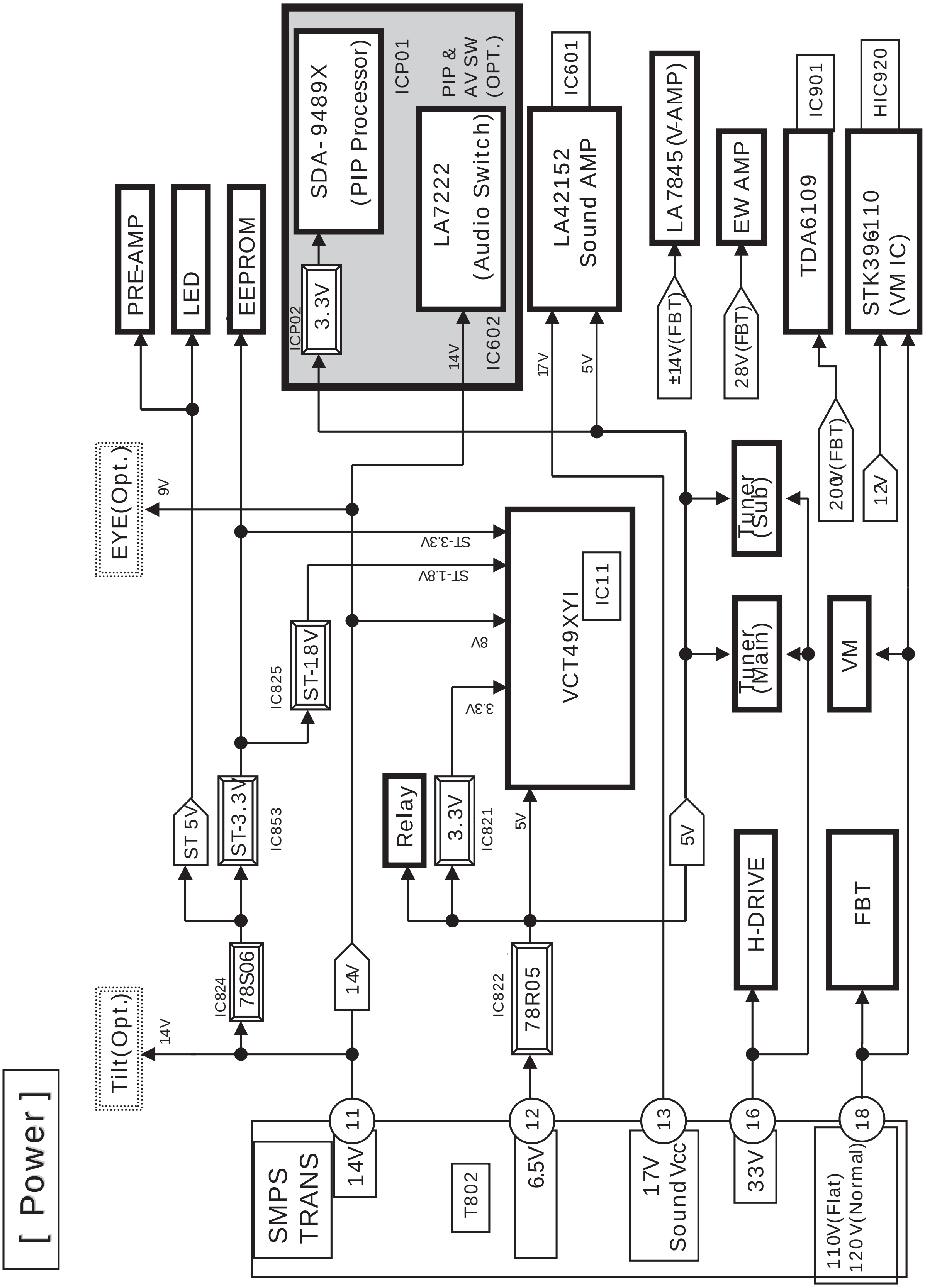
POWER

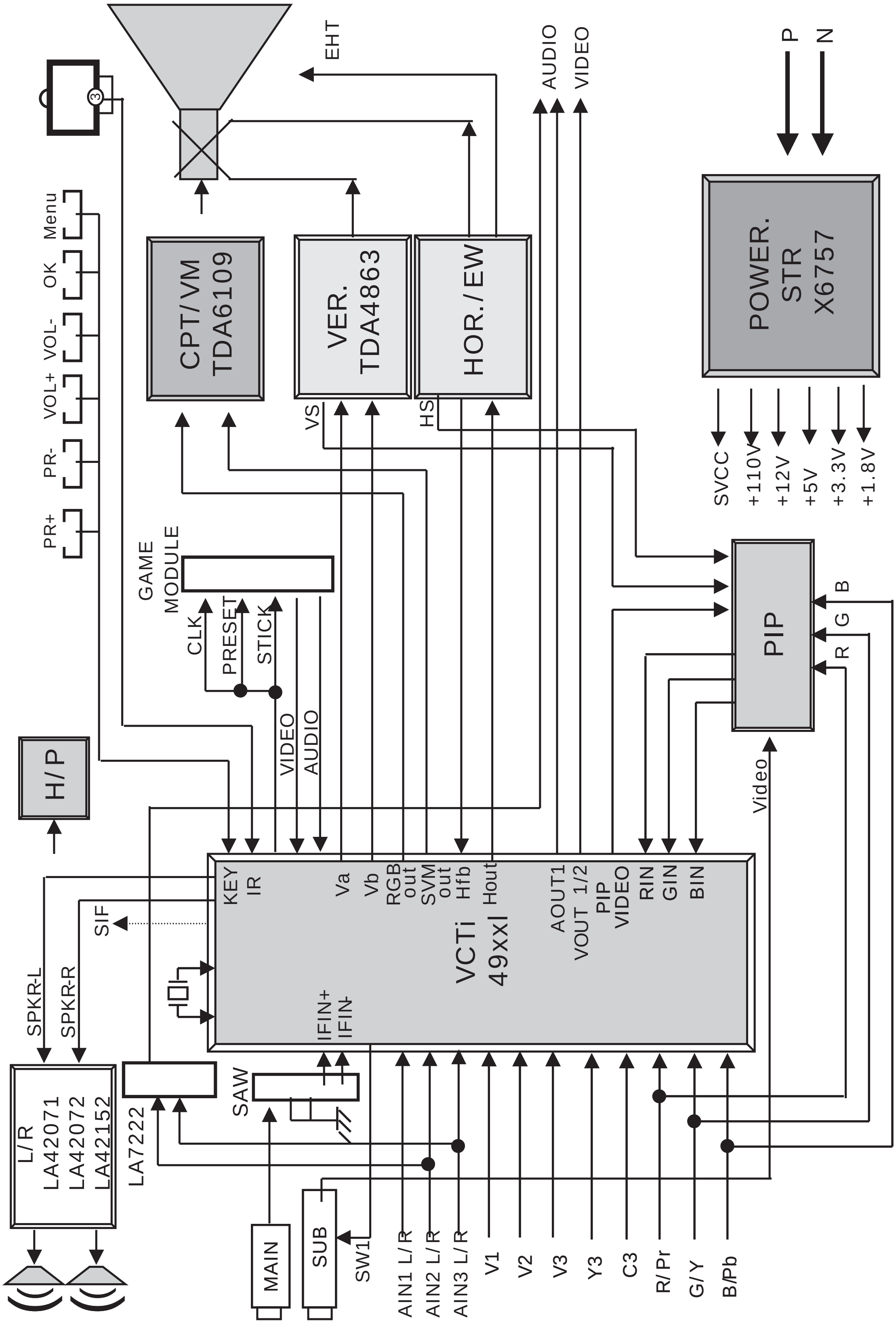


CONTROL



BLOCK DIAGRAM

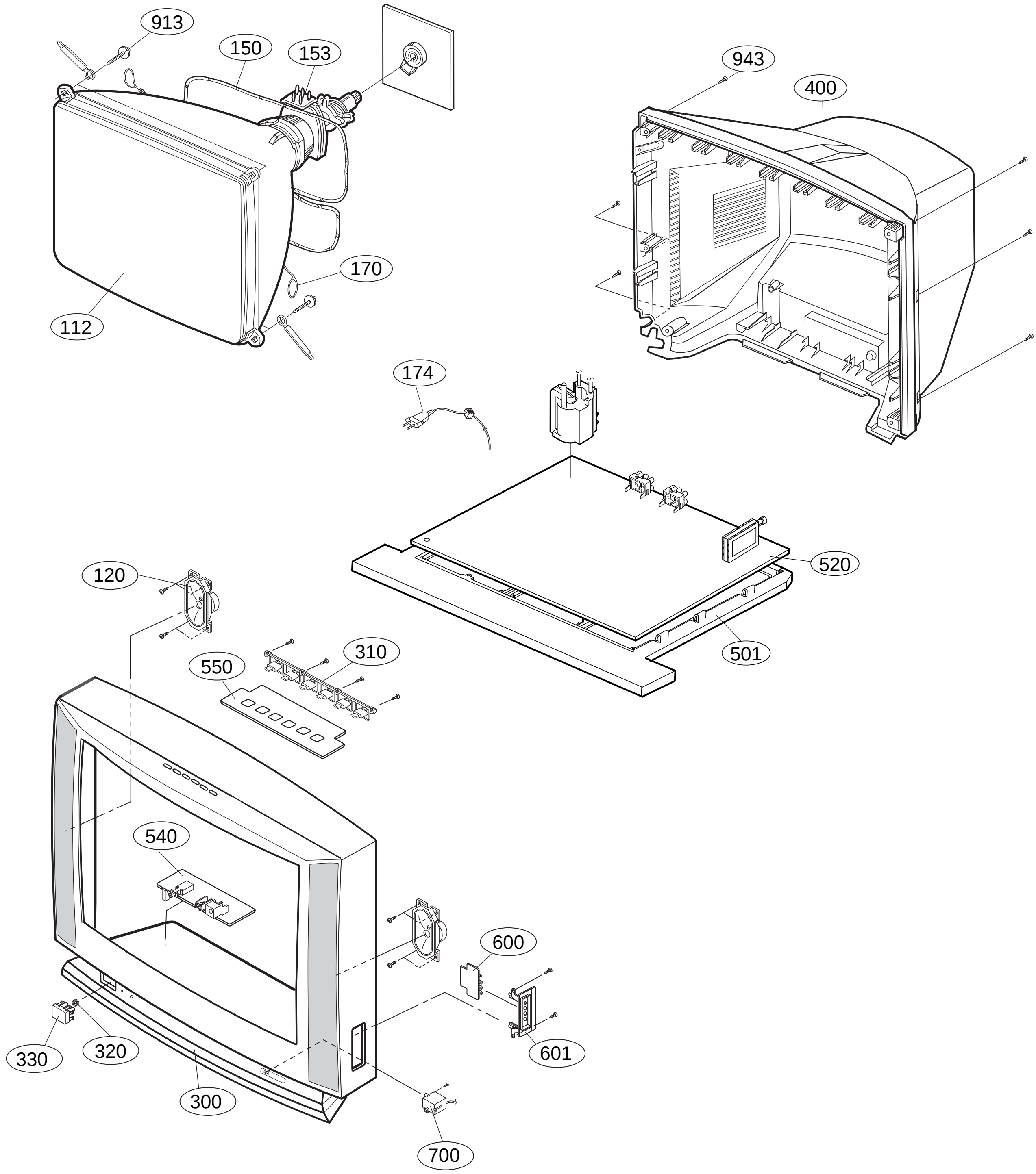




VCTi
49xxI
KEY
IR
Va
Vb
RGB out
SVM out
Hfb
Hout
AOUT1
VOUT 1/2
PIP VIDEO
RIN
GIN
BIN
IFIN+
IFIN-
SIF
SPKR-L
SPKR-R
L/R
LA42071
LA42072
LA42152
LA7222
SAW
MAIN
SUB
SW1
AIN1 L/R
AIN2 L/R
AIN3 L/R
V1
V2
V3
Y3
C3
R/Pr
G/Y
B/Pb
H/P
PR+
PR-
VOL+
VOL-
OK
Menu
GAME MODULE
CLK
PRESET
STICK
VIDEO
AUDIO
CPT/VM
TDA6109
VER.
TDA4863
HOR./EW
VS
HS
EHT
AUDIO
VIDEO
PIP
R
G
B
Video
POWER.
STR
X6757
P
N
SVCC
+110V
+12V
+5V
+3.3V
+1.8V

MEMO

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

LOCA. No.	PART No.	DESCRIPTIONS
⚠ 112	2426VSF0013	CPT SET, 29” SF A68KYN690X000MYB BARE (L,N,M,K,P)
120	120-C77G	SPEAKER,FULLRANGE C122P02K1459 8 OHM 10/15W 130 57*117
⚠ 150	6140VC2001R	COIL,DEGAUSSING 29 FLAT (W) SELLA TECH 15 OHM 58T/0.55
⚠ 153	6150Z-1040B	DY(DEFLECTION YOKE) DC29SLSF1
⚠ 170	170-844J	CPT EARTH, 29” 96T 2LUG 2P HUG
⚠ 174	6410VEH001E	POWER CORD, 174-009Q VDE/SEMKO 2410MM 300 BLACK
300	3091V00277S	CABINET ASSEMBLY, CT-29M65VE(SY-SET) MC049A #117A SPRAY
310	5020V00428C	BUTTON, CONTROL CT-29M65VE ABS, HF-380 6KEY #117A SPRAY”
320	320-062E	SPRING, KNOB
330	5020V00421C	BUTTON, POWER CT-29M65VE ABS, HF-380 1KEY #117A SPRAY
400	3809V00205E	BACK COVER ASSEMBLY, CT-29M66T 2PHONE MC007A
501	3210V00043J	FRAME, CHASSIS HIPS 407AF CT-25Q4 MC-022A
520	6871VMMT20D	PWB(PCB) ASSEMBLY,MAIN MC049A CT-29M65VE.LLLLSM8
540	6871VSMJ43A	PWB(PCB) ASSEMBLY,SUB POWER MC-049A M60 LGESY
550	6871VSMJ32C	PWB(PCB) ASSEMBLY,SUB CTL MC-049A M60 LGESY
600	6871VSMJ30C	PWB(PCB) ASSEMBLY,SUB A/V MC-049A M60 LGESY
601	4810V00254E	BRACKET, SIDE AV CT-29M65VE(AV3) MC049A ABS, HF-380 #117A
700	0IGL120104A	IC,LG SEMICONDUCTOR CDS SENSOR MODULE(P1201-04)
913	332-229G	SCREW,DRAWING HEXAGON D22 L40
943	1PTF0403116	SCREW TAP TITE(P),TRUSS HEAD + D4.0 L16.0 MSWR3/FZB

REPLACEMENT PARTS LIST

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
	IC	
I7	0IPMGPH002A	TDA4863A 7P SOT524-1
IC11	0IZZVA1001D	VCT3804F DIP 64P DIP VCTI49XY
IC11	0IMCRMN026A	VCT4973F MICRONAS 88P PSSDIP
IC12	0IMMRSG036C	M24C16-WBN6 8PIN PDIP ST 16M
IC13	0IFA752700A	KA75270Z 3 TP RE-SET IC MC-007
IC302	0IKE455800E	KIA4558 8DIP DUAL OP AMP
IC601	0IPMGSA021C	LA42152 13P ST 15W 2CH AUDIO AMP
IC801	0IPMGSK015B	STR-X6756 7PIN TO3PF-7L ST PWR IC
IC802	0ILI817000G	LTV817M-VB 4P,DIP BK
IC821	0IMCRKE019A	KIA78R33API KEC 4P TO220 ST 3.3V 1A
IC822	0IMCRKE018A	KIA78R05API KEC 4P TO220 ST 5V 1A
IC824	0IMCRKE020A	KIA78S06P KEC 3P TO-92 TP 6V 0.15A
IC825	0IMCRAU003A	S1117-18PIC AUK KOREA 3P TO220F ST 1.8V 1A
IC826	0ISK120000A	SE120N 3P 120V ERROR AMP
IC853	0IMCRAU004A	S1117-33PIC AUK KOREA 3P TO220F ST 3.3V 1A
IC901	0IPH610700B	TDA6107JF/N3 9P ST RGB AMP
	TRANSISTOR	
Q104	0TR319709AB	KTC3197,TP(KTC388A),KEC
Q301	0TR198009BA	2SA1980Y TP AUK
Q303	0TR127409AB	KTA1274-Y TO-92L TP KEC
Q401	0TR205900AB	KTD2059-Y TO-220IS KEC
Q401	0TRSA10001C	2SD2689LS SANYO ST TO220F 1500V 10A
Q402	0TR437000BA	KTC4370A-Y TO-220IS KEC
Q501	0TR198009BA	2SA1980Y TP AUK
Q502	0TR198009BA	2SA1980Y TP AUK
Q503	0TR198009BA	2SA1980Y TP AUK
Q504	0TR198009BA	2SA1980Y TP AUK
Q505	0TR534309AA	2SC5343Y TP AUK
Q507	0TR198009BA	2SA1980Y TP AUK
Q510	0TR534309AA	2SC5343Y TP AUK
Q601	0TR198009BA	2SA1980Y TP AUK
Q801	0TR421009CB	BF421L(AMMO)TO-92 TP PHILIPS
Q802	0TR534309AA	2SC5343Y TP AUK
Q803	0TR102009AB	KRC102M(KRC1202) KEC TP
Q804	0TR102009AB	KRC102M(KRC1202) KEC TP
Q805	0TR534309AA	2SC5343Y TP AUK
Q807	0TR127409AB	KTA1274-Y TO-92L TP KEC
Q808	0TR102009AB	KRC102M(KRC1202) KEC TP
	DIODE	
D301	0DD400509AA	1N4005 TP KEC
D302	0DD414809ED	1N4148 TP
D403	0DRTW00164B	RGP15J TP52 DO15 .V 1.5A 50A 250NSEC
D404	0DRTW00164A	RGP10J TP52 DO41 .V 1A 30A .SEC 5UA
D405	0DRTW00164B	RGP15J TP52 DO15 .V 1.5A 50A 250NSEC
D406	0DRTW00164B	RGP15J TP52 DO15 .V 1.5A 50A 250NSEC

LOCA. NO	PART NO	DESCRIPTION
D407	0DRTW00164A	RGP10J TP52 DO41 .V 1A 30A .SEC 5UA
D408	0DD414809ED	1N4148 TP
D501	0DD414809ED	1N4148 TP
D502	0DD414809ED	1N4148 TP
D503	0DD414809ED	1N4148 TP
D601	0DD414809ED	1N4148 TP
D602	0DD414809ED	1N4148 TP
D603	0DD414809ED	1N4148 TP
D604	0DD414809ED	1N4148 TP
D801	0DD100009AM	EU1ZV(1) TP SANKEN
D802	0DD100009AM	EU1ZV(1) TP SANKEN
D803	0DD100009AM	EU1ZV(1) TP SANKEN
D815	0DD060009AC	TVR06J TP - 600V 250NSEC
D821	0DRTW00164A	RGP10J TP52 DO41 .V 1A 30A .SEC 5UA
D823	0DD414809ED	1N4148 TP
D827	0DRTW00141A	SFAF504G ST ITO220 200V 5A .A .SEC 10UA
D828	0DRTW00141A	SFAF504G ST ITO220 200V 5A .A .SEC 10UA
D829	0DD410000AD	RU4AM,LF-L1 SANKEN SANKEN
D830	0DRTW00164A	RGP10J TP52 DO41 .V 1A 30A .SEC 5UA
D854	0DD060009AC	TVR06J TP - 600V 250NSEC
D901	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D902	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D903	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D904	0DR140049AC	1N4004A T-81 TP DO41 500V 1.0A 30A - 10UA
DB801	0DRTW00131C	TS6P05G ST TSOP-6 600V 6A .A .SEC .A
LD1101	0DD000000BA	SA5711-B(DL-1LO(S)) BK AMBER
Q401	0DSFC00011A	FFPF60B150DS ST TO220F 600V 20A 120A
ZD10	0DZ910009BD	GDZJ9.1B TP DO34 0.5W 9.1V
ZD122	0DZ330009DG	GDZJ33B TP DO34 0.5W 33.0V
ZD401	0DZ510009BF	GDZ5.1B TP DO34 0.5W 5.1V 0.02A
ZD402	0DZ110009AD	MTZJ11B TP ROHM-K DO34 - 11V 5UA
ZD501	0DZ110009AD	MTZJ11B TP ROHM-K DO34 - 11V 5UA
ZD601	0DZ820009AH	MTZJ8.2B TP ROHM-K DO34 - 8.2V 5UA
ZD801	0DZ620009AH	MTZJ6.2A TP ROHM-K DO34 0.5W 6.2V 150UA
ZD803	0DZ510009BF	GDZ5.1B TP DO34 0.5W 5.1V 0.02A
ZD910	0DZ510009BF	GDZ5.1B TP DO34 0.5W 5.1V 0.02A
ZD911	0DZ510009BF	GDZ5.1B TP DO34 0.5W 5.1V 0.02A
ZD912	0DZ510009BF	GDZ5.1B TP DO34 0.5W 5.1V 0.02A
	CAPACITOR	
C10	0CX2200K409	22P 50V J SL TA52
C101	0CQ2721N409	0.0027UF D 100V 5% PE TP5
C104	0CN1030F679	10000P 16V M Y TA52
C106	0CN1030F679	10000P 16V M Y TA52
C107	0CN1030F679	10000P 16V M Y TA52
C108	0CN1030F679	10000P 16V M Y TA52
C109	0CN1030F679	10000P 16V M Y TA52
C11	0CX2200K409	22P 50V J SL TA52
C110	0CN1030F679	10000P 16V M Y TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
C1101	0CE107DD618	100UF STD 10V M FL TP5
C111	0CE227DD618	220UF STD 10V M FL TP5
C12	0CE107DD618	100UF STD 10V M FL TP5
C1208	0CE106DF618	10UF STD 16V M FL TP5
C1240	0CN2210K519	220P 50V K B TA52
C1241	0CN2210K519	220P 50V K B TA52
C126	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C13	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C17	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C18	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C19	0CN3310K519	330P 50V K B TA52
C216	0CE226DF618	22UF STD 16V M FL TP5
C217	0CE226DF618	22UF STD 16V M FL TP5
C23	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C24	0CE226DD618	22UF STD 10V 20% FL TP 5
C25	0CE105DK618	1UF STD 50V M FL TP5
C303	0CQ1041N409	0.1000UF 100V J PE TP
C304	0CE107DJ618	100UF STD 35V M FL TP5
C306	0CQ3331N509	0.033UF D 100V 10% PE TP5
C308	0CE476DK618	47UF STD 50V M FL TP5
C309	0CN4710K519	470P 50V K B TA52
C310	0CQ1031N509	0.01UF D 100V 10% PE TP5
C402	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C403	0CQ1521N509	0.0015UF D 100V 10% PE TP5
C404	181-015Q	0.02UF 1.6KV H M/PP NI FM20
C405	181-091G	DEHR33D471KN3A 470PF 2KV 10%
C406	181-010H	PP 400V 0.039UF K
C407	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C409	0CK2220W515	2200P 500V K B TS
C410	0CE105CR636	1UF SHL,SD 250V 20% BP(D) TP FM5
C411	181-038K	0.56UF D 250V J M/PP FM20
C413	0CE107DJ618	100UF STD 35V M FL TP5
C414	0CK2710W515	270P 500V K B TS
C415	0CE108DH618	1000UF STD 25V M FL TP5
C416	181-009R	PP 200V 0.022UF K
C417	0CK2710W515	270P 500V K B TS
C419	0CE108DH618	1000UF STD 25V M FL TP5
C420	181-009C	PP 200V 0.056UF J
C421	0CK2710W515	270P 500V K B TS
C422	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C501	0CQ6831N509	0.068UF D 100V 10% PE TP5
C502	0CQ6831N509	0.068UF D 100V 10% PE TP5
C503	0CQ3331N509	0.033UF D 100V 10% PE TP5
C504	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C505	0CN2710K519	270P 50V K B TA52
C506	0CN2710K519	270P 50V K B TA52
C507	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C508	0CE107DD618	100UF STD 10V M FL TP5
C509	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C510	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C511	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C512	0CE107DD618	100UF STD 10V M FL TP5

LOCA. NO	PART NO	DESCRIPTION
C513	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C514	0CE107DD618	100UF STD 10V M FL TP5
C517	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C519	0CN1010K519	100P 50V K B TA52
C520	0CE107DD618	100UF STD 10V M FL TP5
C521	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C522	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C524	0CE107DD618	100UF STD 10V M FL TP5
C526	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C527	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C528	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C529	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C530	0CN1010K519	100P 50V K B TA52
C532	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C533	0CE107DD618	100UF STD 10V M FL TP5
C534	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C535	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C536	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C537	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C538	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C540	0CE107DD618	100UF STD 10V M FL TP5
C541	0CE107DD618	100UF STD 10V M FL TP5
C542	0CE107DD618	100UF STD 10V M FL TP5
C543	0CE107DD618	100UF STD 10V M FL TP5
C545	0CK1010K515	100P 50V K B TS
C547	0CN2710K519	270P 50V K B TA52
C548	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C602	0CE108DH618	1000UF STD 25V M FL TP5
C603	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C604	0CQ2731N509	0.027UF D 100V 10% PE TP5
C605	0CE476DF618	47UF STD 16V M FL TP5
C606	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C607	0CE106DF618	10UF STD 16V M FL TP5
C608	0CE106DF618	10UF STD 16V M FL TP5
C609	0CQ2731N509	0.027UF D 100V 10% PE TP5
C610	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C611	0CE476DH618	47UF STD 25V 20% FL TP 5
C612	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C613	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C614	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C615	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C616	0CE476DD618	47UF STD 10V 20% FL TP 5
C617	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C618	0CN1010K519	100P 50V K B TA52
C619	0CE106DK618	10UF STD 50V M FL TP5
C620	0CN1010K519	100P 50V K B TA52
C624	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C625	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C626	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C627	0CK1030K945	0.01UF 50V Z F TR
C631	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C632	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI

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LOCA. NO	PART NO	DESCRIPTION
C636	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C802	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C803	0CE337KV6A0	330UF SLT 450V 20% VNSN BULK
C804	0CK10201515	1000P 1KV K B TS
C806	0CK10201515	1000P 1KV K B TS
C809	0CE105DK618	1UF STD 50V M FL TP5
C810	0CE336DK618	33UF STD 50V M FL TP5
C811	181-014Y	MPP 1.6KV 0.0015UF J
C813	0CK4710W515	470PF 500V K B TR
C815	0CK8210K515	820P 50V K B TS
C817	0CK1040K945	0.1UF 50V Z F TR
C819	0CK1520K515	1500P 50V K B TS
C820	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C821	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10%
C822	0CE477DH618	470UF STD 25V M FL TP5
C823	0CE477DD618	470UF STD 10V M FL TP5
C824	0CE108DD618	1000UF STD 10V M FL TP5
C825	0CK47201510	4700P 1KV K B S
C826	0CE108DD618	1000UF STD 10V M FL TP5
C827	0CE108DD618	1000UF STD 10V M FL TP5
C828	0CE477DD618	470UF STD 10V M FL TP5
C829	0CE335CK636	3.3UF SHL,SD 50V 20% FM5 BP(D) TP
C830	0CE108DH618	1000UF STD 25V M FL TP5
C831	0CE227DP61A	220UF STD 160V 20% FL TP 7.5
C833	0CE107CP618	100U SHL 160V M FL TP5
C834	181-091Y	R 680PF 2KV 10%,-10% R/TP TP7.5
C835	0CK4710W515	470PF 500V K B TR
C837	0CQ4731N509	0.047UF D 100V 10% PE TP5
C838	0CE227DK618	220UF STD 50V M FL TP5
C839	0CE106DH618	10UF STD 25V M FL TP5
C840	0CE228BF618	2200UF KME 16V M FL TP5
C843	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C845	0CE107DD618	100UF STD 10V M FL TP5
C846	181-091X	R 560PF 2KV 10%,-10% R/TP TP7.5
C868	0CE227DD618	220UF STD 10V M FL TP5
C901	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C902	0CQ1044R539	0.1UF TE 250V 10% M/PE NI TP5
C903	181-033S	2KV B 122K TP7.5
C904	0CE475DR618	4.7UF STD 250V 20% FL TP 5

COIL & INDUCTOR

LOCA. NO	PART NO	DESCRIPTION
L101	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L103	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L12	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L1203	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L1204	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L1243	0LA0472K119	INDUCTOR,47UH K 2.3*3.4 TP
L1244	0LA0472K119	INDUCTOR,47UH K 2.3*3.4 TP
L401	150-717J	COIL,CHOKE CHOKE 560UH (E/W)
L402	150-L01D	COIL,LINEARITY 20UH 1PHY 1TURN 1
L501	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L502	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L503	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L504	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L505	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L506	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L507	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L508	0LA0101K119	INDUCTOR,1.0UH K 2.3*3.4 TP
L509	0LA0152K119	INDUCTOR,15UH K 2.3*3.4 TP
L801	150-C02F	COIL,CHOKE 82UH PHY TURN
T401	151-C02F	TRANSFORMER,H-DRIVE,EI-19,BULK
T803	6170VMCC01P	TRANSFORMER,EER5345 300UH B+120V

CONNECTOR

LOCA. NO	PART NO	DESCRIPTION
P07B	387-A05J	5P 2.5MM 500MM H-B UL1007AWG26
P08B	387-A06J	6P 2.5MM 500MM H-B UL1007AWG26
PA01B	387-A04D	4P 2.5MM 250MM H-B UL1007AWG26

RESISTOR

LOCA. NO	PART NO	DESCRIPTION
F802	0RP0050H709	0.05 OHM 1/2 W 10% TA52
F804	0RP0050H709	0.05 OHM 1/2 W 10% TA52
F805	0RP0020J809	0.02 OHM 1 W 20% TA52
F806	0RP0020J809	0.02 OHM 1 W 20% TA52
FR402	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR403	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR404	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR405	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR901	0RF0121K607	1.2 OHM 2 W 5.00% TA62
J204	0RD1000F609	100 OHM 1/6 W 5% TA52
J208	0RD1000F609	100 OHM 1/6 W 5% TA52
J211	0RD1000F609	100 OHM 1/6 W 5% TA52
J220	0RD1000F609	100 OHM 1/6 W 5% TA52
J222	0RD1000F609	100 OHM 1/6 W 5% TA52
J261	0RD1000F609	100 OHM 1/6 W 5% TA52
J509	0RD1000F609	100 OHM 1/6 W 5% TA52
J510	0RD1000F609	100 OHM 1/6 W 5% TA52
J512	0RD1000F609	100 OHM 1/6 W 5% TA52
J566	0RD1000F609	100 OHM 1/6 W 5% TA52
R102	0RD7501F609	7.5K OHM 1/6 W 5.00% TA52
R105	0RD7502F609	75K OHM 1/6 W 5.00% TA52
R109	0RD0562F609	56 OHM 1/6 W 5.00% TA52
R11	0RD1000F609	100 OHM 1/6 W 5% TA52
R110	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R111	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R112	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R113	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R1143	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R1146	0RD3900F609	390 OHM 1/6 W 5% TA52
R1147	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R1148	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R1149	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R1150	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R1201	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1230	0RD2200A609	220 OHM 1/2 W(7.0) 5.00% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

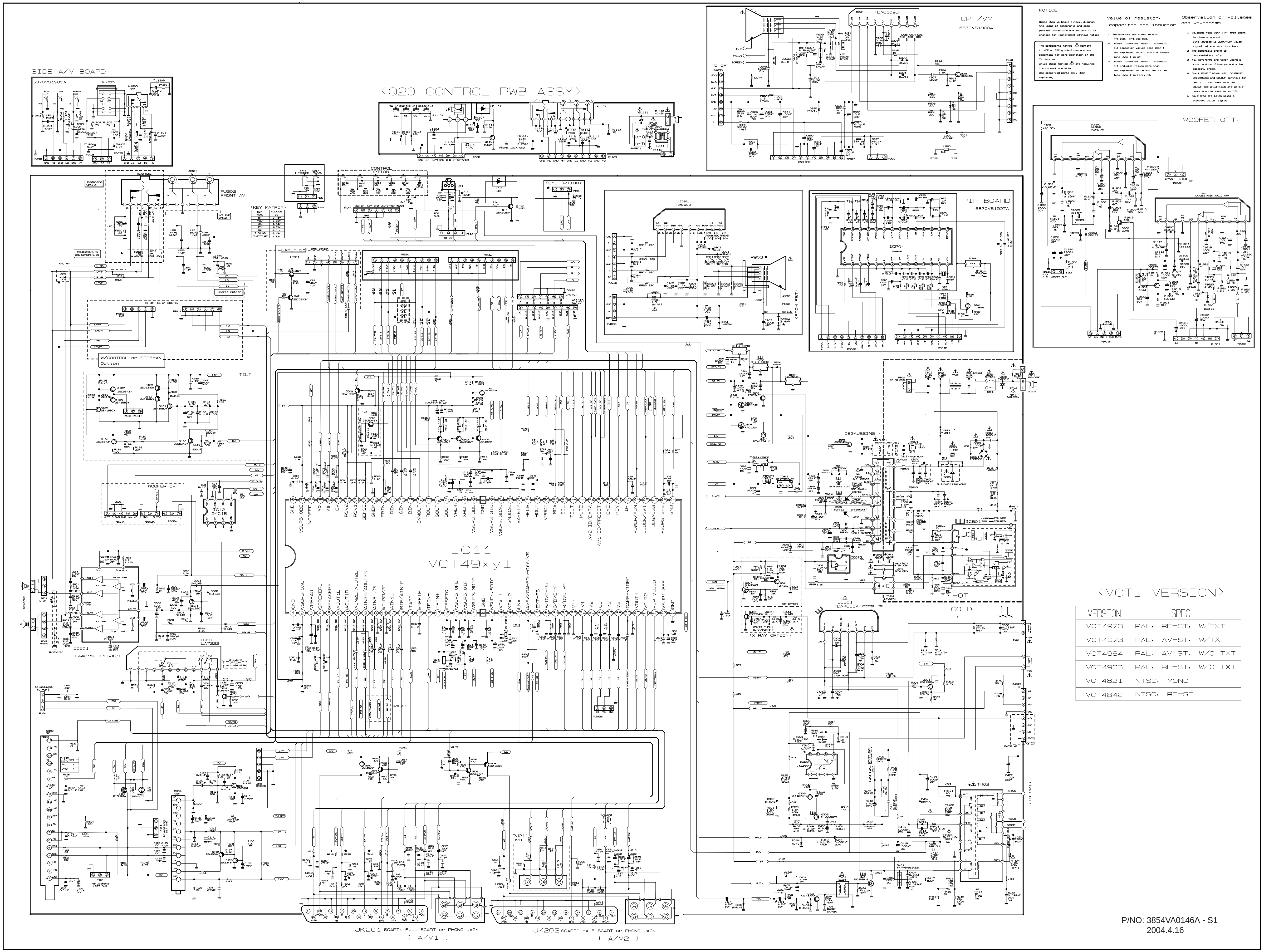
LOCA. NO	PART NO	DESCRIPTION
R1231	0RD2200A609	220 OHM 1/2 W(7.0) 5.00% TA52
R124	0RD2202F609	22K OHM 1/6 W 5% TA52
R125	0RD2700A609	270 OHM 1/2 W(7.0) 5.00% TA52
R126	0RD1000F609	100 OHM 1/6 W 5% TA52
R127	0RD1000F609	100 OHM 1/6 W 5% TA52
R201	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R202	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R209	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R210	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R211	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R212	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R24	0RD1000F609	100 OHM 1/6 W 5% TA52
R25	0RD1000F609	100 OHM 1/6 W 5% TA52
R26	0RD2700F609	270 OHM 1/6 W 5% TA52
R28	0RD1000F609	100 OHM 1/6 W 5% TA52
R29	0RD1000F609	100 OHM 1/6 W 5% TA52
R30	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R301	0RD1501A609	1.5K OHM 1/2 W(7.0) 5.00% TA52
R302	0RN3602F409	36K OHM 1/6 W 1.00% TA52
R303	0RD2400A609	240 OHM 1/2 W(7.0) 5.00% TA52
R304	0RD0561A609	5.6 OHM 1/2 W(7.0) 5.00% TA52
R305	0RD1002F609	10K OHM 1/6 W 5% TA52
R306	0RD1002F609	10K OHM 1/6 W 5% TA52
R307	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R308	0RD4702F609	47K OHM 1/6 W 5% TA52
R308	0RD3902F609	39K OHM 1/6 W 5.00% TA52
R309	0RD2001F609	2K OHM 1/6 W 5% TA52
R31	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R310	0RD4702F609	47K OHM 1/6 W 5% TA52
R312	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R313	0RN0471H509	4.7 OHM 1/2 W 2.00% TA52
R314	0RN0471H509	4.7 OHM 1/2 W 2.00% TA52
R315	0RS2700K607	270 OHM 2 W 5.00% TA62
R316	0RD1000F609	100 OHM 1/6 W 5% TA52
R317	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R318	0RN2001F409	2K OHM 1/6 W 1.00% TA52
R319	0RN8202F409	82K OHM 1/6 W 1.00% TA52
R32	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R320	0RD1001F609	1K OHM 1/6 W 5% TA52
R321	0RD0561A609	5.6 OHM 1/2 W(7.0) 5.00% TA52
R322	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R323	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R324	0RD4700F609	470 OHM 1/6 W 0.05 TA52
R325	0RD2701A609	2.7K OHM 1/2 W(7.0) 5.00% TA52
R326	0RD1501A609	1.5K OHM 1/2 W(7.0) 5.00% TA52
R328	0RN4302F409	43K OHM 1/6 W 1.00% TA52
R33	0RD1000F609	100 OHM 1/6 W 5% TA52
R35	0RD1000F609	100 OHM 1/6 W 5% TA52
R37	0RD1000F609	100 OHM 1/6 W 5% TA52
R38	0RD1002F609	10K OHM 1/6 W 5% TA52
R401	0RD2701A609	2.7K OHM 1/2 W(7.0) 5.00% TA52
R403	0RD5600A609	560 OHM 1/2 W(7.0) 0.05 TA52

LOCA. NO	PART NO	DESCRIPTION
R404	0RD0332A609	33 OHM 1/2 W(7.0) 5.00% TA52
R405	0RS1500K690	150 OHM 2 W 5% MF5.0
R408	0RS0221K619	2.2 OHM 2 W 5% TR
R409	0RD1801A609	1.8K OHM 1/2 W(7.0) 5.00% TA52
R410	0RMZVBK002D	15K OHM 5W +/-5% RSR V-TYPE
R411	0RS5102H609	51K OHM 1/2 W 5.00% TA52
R412	0RD7501A609	7.5K OHM 1/2 W(7.0) 5.00% TA52
R413	0RS2202H609	22K OHM 1/2 W 5.00% TA52
R414	0RS1001H609	1K OHM 1/2 W 5.00% TA52
R415	0RD1002F609	10K OHM 1/6 W 5% TA52
R416	0RD6801F609	6.8K OHM 1/6 W 5.00% TA52
R417	0RD8203F609	820K OHM 1/6 W 5.00% TA52
R42	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R421	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R422	0RD1002F609	10K OHM 1/6 W 5% TA52
R449	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R501	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R502	0RN6801F409	6.8K OHM 1/6 W 1.00% TA52
R503	0RN6801F409	6.8K OHM 1/6 W 1.00% TA52
R504	0RD6801F609	6.8K OHM 1/6 W 5.00% TA52
R506	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R507	0RD2700F609	270 OHM 1/6 W 5% TA52
R508	0RD1201F609	1.2K OHM 1/6 W 5% TA52
R509	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R510	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R511	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R512	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R513	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R514	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R515	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R516	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R517	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R518	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R519	0RD2701F609	2.7K OHM 1/6 W 5% TA52
R520	0RD1001F609	1K OHM 1/6 W 5% TA52
R521	0RD3002F609	30K OHM 1/6 W 5.00% TA52
R522	0RD0152F609	15 OHM 1/6 W 5.00% TA52
R527	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R532	0RD1000F609	100 OHM 1/6 W 5% TA52
R539	0RD1002F609	10K OHM 1/6 W 5% TA52
R540	0RD4702F609	47K OHM 1/6 W 5% TA52
R541	0RD2700F609	270 OHM 1/6 W 5% TA52
R542	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R543	0RD9100F609	910 OHM 1/6 W 5.00% TA52
R555	0RD4700F609	470 OHM 1/6 W 0.05 TA52
R557	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R558	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R601	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R602	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R603	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R604	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R605	0RD1001F609	1K OHM 1/6 W 5% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
R606	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R607	0RD1002F609	10K OHM 1/6 W 5% TA52
R608	0RD1001F609	1K OHM 1/6 W 5% TA52
R609	0RD1000F609	100 OHM 1/6 W 5% TA52
R610	0RD1802F609	18K OHM 1/6 W 5.00% TA52
R611	0RD1001F609	1K OHM 1/6 W 5% TA52
R612	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R613	0RD0221F609	2.2 OHM 1/6 W 5.00% TA52
R614	0RD1000F609	100 OHM 1/6 W 5% TA52
R615	0RD1001F609	1K OHM 1/6 W 5% TA52
R616	0RD2700F609	270 OHM 1/6 W 5% TA52
R617	0RD1000F609	100 OHM 1/6 W 5% TA52
R618	0RD1000F609	100 OHM 1/6 W 5% TA52
R619	0RD1000F609	100 OHM 1/6 W 5% TA52
R620	0RD1000F609	100 OHM 1/6 W 5% TA52
R621	0RD1000F609	100 OHM 1/6 W 5% TA52
R622	0RD1000F609	100 OHM 1/6 W 5% TA52
R623	0RD1000F609	100 OHM 1/6 W 5% TA52
R624	0RD1000F609	100 OHM 1/6 W 5% TA52
R664	0RD1000F609	100 OHM 1/6 W 5% TA52
R802	0RKZVTA001K	0.47M OHM 1/2 W 5% TA52
R803	180-822M	RWR 15W 1.0 OHM J PD
R804	0RS4702K619	47K OHM 2 W 5% TR
R805	0RS4702K619	47K OHM 2 W 5% TR
R806	180-A01P	0.13 OHM 2 W 5% TA62 RWR
R807	0RD2200A609	220 OHM 1/2 W(7.0) 5.00% TA52
R808	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R809	0RD1001F609	1K OHM 1/6 W 5% TA52
R814	0RK8204H609	8.2M OHM 1/2 W 5.00% TA52
R816	0RD1001F609	1K OHM 1/6 W 5% TA52
R817	0RD0152F609	15 OHM 1/6 W 5.00% TA52
R823	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R825	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R827	0RD1001F609	1K OHM 1/6 W 5% TA52
R828	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R831	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R838	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R840	0RF0161K607	1.6 OHM 2 W 5.00% TA62
R841	0RF0161K607	1.6 OHM 2 W 5.00% TA62
R842	0RD1002F609	10K OHM 1/6 W 5% TA52
R843	0RD3300A609	330 OHM 1/2 W(7.0) 5.00% TA52
R844	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R845	0RD1002F609	10K OHM 1/6 W 5% TA52
R846	0RD7502F609	75K OHM 1/6 W 5.00% TA52
R847	0RD2203F609	220K OHM 1/6 W 5.00% TA52
R858	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R901	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R902	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R903	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R906	0RD1000F609	100 OHM 1/6 W 5% TA52
R907	0RD1000F609	100 OHM 1/6 W 5% TA52
R908	0RD1000F609	100 OHM 1/6 W 5% TA52

LOCA. NO	PART NO	DESCRIPTION
R909	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R910	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R911	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R912	0RD2204A609	2.2M OHM 1/2 W(7.0) 5.00% TA52
R925	0RD2200F609	220 OHM 1/6 W 5.00% TA52
SWITCH		
SW1101	140-315A	TACT SKHV17910B LG C&D 12V
SW1102	140-315A	TACT SKHV17910B LG C&D 12V
SW1103	140-315A	TACT SKHV17910B LG C&D 12V
SW1104	140-315A	TACT SKHV17910B LG C&D 12V
SW1105	140-315A	TACT SKHV17910B LG C&D 12V
SW1106	140-315A	TACT SKHV17910B LG C&D 12V
SWP801	6600VM2002A	SDKEA3 ALPS IEC 250V 8A HORIZONTAL 480G
SPARK GAP, AXAL		
SG901	165-004A	AG20PT 152F-L3N/S-23
SG902	165-004A	AG20PT 152F-L3N/S-23
SG903	165-004A	AG20PT 152F-L3N/S-23
SG904	6918VAX002H	WSP-122N 1200V -100V,+300V
FILTER & CRYSTAL		
FB1241	125-123A	FERRITE BFD3565R2F(TAPING)
FB401	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB801	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB802	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB803	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB825	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
T801	150-F06P	LINE FILTER SQE2930 10MH
X11	6202VDB007B	RESONATOR,HC49U 20.250MHZ 30PPM
Z101	6200QL3001Z	B39361-X6966-D100 EPCOS ST
JACK		
JK1201	380-068D	UEJ-CV-003 UGCOM E/P
JK1203	6613V00004B	3P
JK201	6612VJH011K	PPJ109K A/V I/O 6P STEREO FOR21PIN
JK202	6612VJH011L	PPJ109L A/V I/O 6P DVD IN Y-PB-PR ENG
ACCESSORIES		
A1	3828VA0464H	MANUAL,OWNERS MC049A RUS/BZ03 LG RU/EN
A2	6710V00112S	REMOTE CONTROLLER,MC049A W/O PIP W/O TXT
MISCELLANEOUS		
FP801	0FT4001B51C	FUSE, 4000MA 250 V 5.2X20
PA1101	6712SCA228B	REMOTE CONTROLLER RECEIVER,AT138BNN1S
SK901	6620VBC003A	SOCKET (CIRC),CPTPCS030A 8PIN 14/360
T402	6174V-5013A	FBT,BSC28-N2351 29 YINYANG B+120V FBT
TH801	163-058D	THERMISTOR,03-07MX 7 OHM 20% 80/60
TU101	6700VS0002F	TUNER,TAEW-G002D W/W ALL IN W/S 09Z VE
VD1111	164-003G	VARISTOR,TVR621D14A THINKING 620V 10%



<VCTi VERSION>

VERSION	SPEC
VCT4973	PAL, RF-ST, W/TXT
VCT4973	PAL, AV-ST, W/TXT
VCT4964	PAL, AV-ST, W/O TXT
VCT4963	PAL, RF-ST, W/O TXT
VCT4821	NTSC, MONO
VCT4842	NTSC, RF-ST

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